

# THE OMINOUS AUDIO BLOCK

THIS IS HOW MOST DIGITAL SIGNAL PROCESSING (DSP)  
INTERFACES WITH THE WORLD:

```
void process(float[][] input, float[][] output) {  
    // process input + output  
}
```

WHY SHOULD YOU KNOW ABOUT THIS?

# 1. IF YOU WANT TO USE OR INTEGRATE OR MODIFY:

- LIBRARIES
- APIS
- SNIPPETS ( E.G FROM CHATGPT )

## 2. IF YOU WANT TO ROLL YOUR OWN:

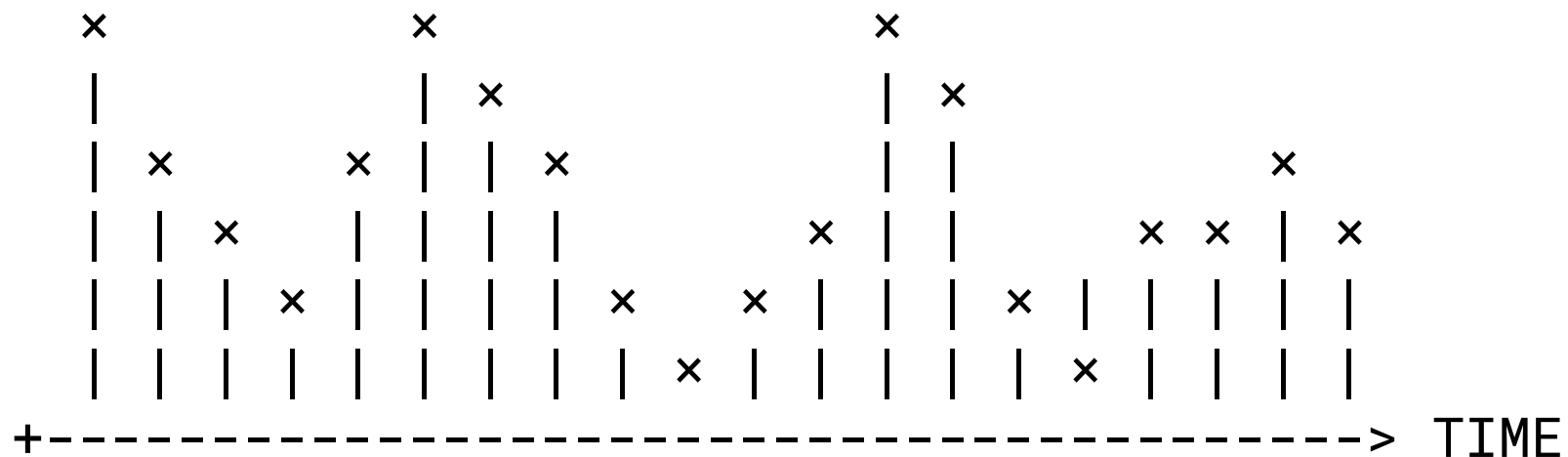
- LIBRARIES
- VSTS ( OR AUDIO UNITS )
- WRITE MCU CODE
- APPLICATION
- TRANSCEND THE CONFINEMENTS OF *PROGRAMMING* LANGUAGES E.G
  - PROCESSING/JAVA
  - C/C++
  - RUST

BOTTOMLINE, YOU SHOULD KNOW ABOUT  
THE OMINOUS AUDIO BLOCK

# AN EXTREMELY BRIEF EXPLANATION OF THE OMINOUS AUDIO BLOCK

- › INSTEAD OF JUST CALCULATING A SIGNAL *SAMPLE BY SAMPLE*, IT IS PRODUCED IN A BLOCK AKA AN **AUDIO BLOCK**.





SAMPLES OVER TIME  
AUDIO BLOCKS OF 8 SAMPLES

BTW A SAMPLE IS USUALLY A FLOAT VALUE BETWEEN  
[-1.0, 1.0].

## SOME LIBRARIES AND PROJECTS THAT USE THIS CONCEPT:

- KLANGSTROM #ARDUINO ==TODO UPLOAD UPDATE==
- WELLEN #PROCESSING
- MOZZI #ARDUINO
- TEENSY AUDIO LIBRARY WITH THE HELP OF KLANGSTROM TEENSY  
AUDIO LIBRARY
- MUTABLE INSTRUMENTS
- DAISYSP

AND MANY, MANY MORE.

PS WHY SHOULD I LEARN DSP IN THE FIRST PLACE WHEN THERE ARE ALL THESE NICE VISUAL ENVIRONEMENTS AND DAWS?

## REASON#1

BECOME LITERATE IN THE BASIC BUILDING BLOCKS.

DO NOT JUST *CONSUME* BUT ALSO BECOME ABLE TO *PRODUCE*.

**REASON#2**

TRANSLATES WELL INTO OTHER CONTEXTS E.G MCU

**REASON#3**

SONIFICATION ( DATA + PARAMETERS + INTERACTIONS )

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